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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 2573**  
Jens FENNEN et al. : Attorney Docket No. 2004\_2006A  
Serial No. 10/519,540 : Group Art Unit 1751  
Filed December 28, 2004 : Examiner Amina S. Khan  
PROCESS AND AUXILIARIES FOR : **Mail Stop Amendment**  
THE TREATMENT OF ORGANICALLY  
TANNED LEATHER

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**RESPONSE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

Sir:

This is responsive to the Office Action of June 25, 2007, wherein the Examiner requires an election of species as outlined on page 2 of the Office Action. Applicants respectfully traverse this requirement, for the following reasons.

The Examiner takes the position that the species lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

However, the PCT International Preliminary Examination Report does not raise any issue of lack of unity of invention, and it is readily apparent that this is for good reasons.

Thus, the present invention is directed to a process for the treatment of leathers or skins, pretanned with dialdehydes and retanned with organic anionic tanning agents, with anionic reagents in an aqueous liquor, in which the anionic reagents, e.g. an anionic dye, is covalently bound with the help of polyamines as fixing agents. The leather in question has, due to the specific (pre)treatment, an anionic character (being a so-called "wet white" leather). In the past, an anionic dye could not be bound onto a "wet white" leather with good results due to inherent repellence (anionic – anionic). But the present

inventors have found that polyamines having a cationic character as fixing agent lead to very good results (e.g. good wet fastness) by overcoming this repellence with high effectiveness.

The polyamines are characterized as having at least three amino groups in the molecule to be able to achieve this effect as a very good fixing agent. At least three amino groups are essential to achieve good fixing properties (for forming covalent bonds between the tanning agents and the dye). It is obvious that to achieve this effect as fixing agent, in principle it does not matter if the anionic dye and cationic polyamine are added simultaneously or stepwise in any order; it only matters that all the compounds are present (pre-treated/tanned leather – dye – fixing agent, whereby it is normal that the substrate comes first).

Claim 1 simply covers the three alternatives to avoid circumventing this treatment by third parties in case only one of those treatment steps would have been disclosed/claimed.

Thus, referring to item 3 on page 3 of the Office Action, Applicants strongly disagree with the Examiner's position that the species lack the same or corresponding special technical features for the reason that the methods differ in the order of steps and reactants which would produce different structural and functional effects on the leathers treated; and in this regard, Applicants again emphasize that lack of unity of invention was **not** found during the PCT phase.

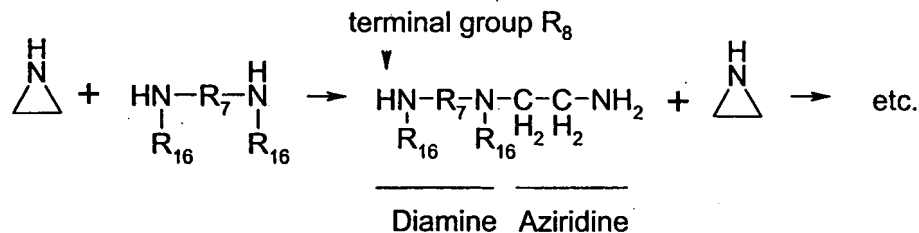
In view of these considerations, Applicants respectfully request that the requirement for election of species be withdrawn.

Nevertheless, to be fully responsive to the Office Action, and as required by the Examiner, Applicants hereby make the following elections:

1. Method b), as illustrated by Example B1 in the specification, wherein the leather is first treated with anionic reagents (dye) and then, in a fresh liquor, with a polyamine. Thus, a polyamine is selected (not a reaction product).
2.  $R_1 = H$  in formula (II) and  $R_{2,3} = H$  in formula (III) according to the description at the bottom of page 10 of the specification.

3. As polyamine, Applicants elect an adduct of organic diamines and aziridine.  $R_{16} = H$  in formulas (IV) and (V),  $R_7$  is  $C_2$ -alkylene = ethylene in formula (V),  $R_8 = H$ .

Applicants note that the Examiner is incorrect in characterizing  $R_8$  as a substituent (item 3 on page 3 of the Office Action).  $R_8$  is not a substituent, but rather, is a terminal group, as illustrated below:



In this example of the reaction between a diamine and aziridine, the terminal group is a hydrogen atom. The diamine provides the structural element of formula (IV) and the aziridine the structural element of formula (V).

4. As a compound of formula (VI), Applicants elect 1-trimethoxysilyl-3-glycidyloxypropane, as disclosed in Example A1 and the penultimate paragraph on page 15.

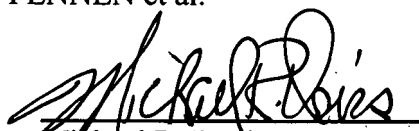
As noted by the Examiner, all of claims 1-18 read on the elected species.

Action on the merits is requested.

Respectfully submitted,

Jens FENNEN et al.

By:



Michael R. Davis

Registration No. 25,134

Attorney for Applicants

MRD/pth  
 Washington, D.C. 20006-1021  
 Telephone (202) 721-8200  
 Facsimile (202) 721-8250  
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